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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,680	11/09/2001	Yoon San Park	0630-1356P	5799

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EXAMINER

BERCK, KENNETH A

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 08/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,680

Applicant(s)

PARK, YOON SAN

Examiner

Ken A Berck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 18 April 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Amendment A, filed Apr 18, 2003, has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Ragland, Jr. (US 5644192).

Regarding claim 1, Ragland discloses (figs 1 and 3) a supporting frame structure for a tension-type shadow mask of a color CRT with a first and second main frames (42, 44) having a portion for supporting a shadow mask, a first and second sub frame (46, 48) combined with the main frames for applying elastic force to the shadow mask, and the curvature of each of the portions satisfies the equation $\Delta R/R=0.95\sim 1.05$.

Regarding claim 4, Ragland discloses (figs 1 and 3) a supporting frame structure for a tension-type shadow mask of a color CRT with a first and second main frames (42, 44) having a portion for supporting a shadow mask, a first and second sub frame (46, 48) combined with the main frames for applying elastic force to the shadow mask, and the portions have a single radius of curvature.

Regarding claim 5, Ragland discloses (figs 1) the curvature of each of the portions satisfies the equation $\Delta R/R=0.95\sim 1.05$.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ragland, Jr. (US 5644192) in view of Horiuchi (US 6339283).

Regarding claim 3, Ragland discloses all of the above claim limitations but fails to clearly point out damper wires fixed to the first and second frames and attached to the shadow mask.

Horiuchi discloses (fig 1) damper wires fixed to the first and second frames and attached to the shadow mask in order to prevent vibration.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame of Ragland with the damper wires fixed to the first and second frames and attached to the shadow mask in order to prevent vibration, as taught by Horiuchi.

Regarding claim 6, Ragland discloses all of the above claim limitations but fails to clearly point out damper wires fixed to the first and second frames and attached to the shadow mask.

Horiuchi discloses (fig 1) damper wires fixed to the first and second frames and attached to the shadow mask in order to prevent vibration.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame of Ragland with the damper wires fixed to the

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first and second frames and attached to the shadow mask in order to prevent vibration, as taught by Horiuchi.

Regarding claim 7, Ragland discloses all of the above claim limitations but fails to clearly point out damper wires fixed to the first and second frames and attached to the shadow mask.

Horiuchi discloses (fig 1) damper wires fixed to the first and second frames and attached to the shadow mask in order to prevent vibration.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the frame of Ragland with the damper wires fixed to the first and second frames and attached to the shadow mask in order to prevent vibration, as taught by Horiuchi.

Response to Arguments

Applicant's arguments filed Apr 18, 2003, have been fully considered but they are not persuasive.

Applicant argues that Ragland fails to disclose a single radius of curvature after the elastic force is removed to satisfy the equation $\Delta R/R=0.95\sim 1.05$. Examiner points out the single radius of curvature of the arcing frame in figure 1, which satisfies the equation as $\Delta R/R=1$.


Contact Information

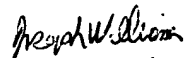
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab 
July 24, 2003


Joseph Williams